CLAIMS

What is claimed is:

1. A method of diagnosing or aiding in the diagnosis of a neuropsychiatric disorder in an individual comprising

a) obtaining a nucleic acid sample from the individual; and

b) determining the nucleotide present at one or more of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene,

wherein presence of one or more of an A at nucleotide position 476, a G at nucleotide position 942 or a C at nucleotide position 1635 is indicative of increased likelihood of a neuropsychiatric disorder in the individual as compared with an individual having one or more of a G at nucleotide position 476, a T at nucleotide position 942 or a T at nucleotide position 1635.

2. The method of Claim 1, wherein the dopamine beta-hydroxylase gene has the nucleotide sequence of SEQ ID NO: 1.

3. The method of Claim 1, wherein the nucleotide present at all three of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene is determined.

4. The method of Claim 1, wherein the neuropsychiatric disorder is selected from the group consisting of bipolar disorder, schizophrenia, schizoaffective disorder, recurrent unipolar depression, hypomania, mood disorders, anxiety disorders, ADHD, Tourette's syndrome, addictive disorders, substance use disorders, substance abuse disorders, and disorders related to blood pressure.

5. The method of Claim 4, wherein the neuropsychiatric disorder is bipolar disorder.

6. A method of diagnosing or aiding in the diagnosis of a neuropsychiatric disorder in an individual comprising

a) obtaining a nucleic acid sample from the individual; and

b) determining the nucleotide present at one or more of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene,

wherein presence of one or more of a G at nucleotide position 476, a T at nucleotide position 942 or a T at nucleotide position 1635 is indicative of decreased likelihood of a neuropsychiatric disorder in the individual as compared with an individual having one or more of an A at nucleotide position 476, a G at nucleotide position 942 or a C at nucleotide position 1635.

7. The method according to Claim 6, wherein the dopamine beta-hydroxylase gene has the nucleotide sequence of SEQ ID NO: 1.

8. The method of Claim 6, wherein the nucleotide present at all three of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene is determined.

9. The method according to Claim 6, wherein the neuropsychiatric disorder is bipolar disorder.

10. A method for predicting the likelihood that an individual will have a neuropsychiatric disorder, comprising the steps of:

a) obtaining a DNA sample from an individual to be assessed; and

b) determining the nucleotide present at one or more of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene,

wherein presence of one or more of an A at nucleotide position 476, a G at nucleotide position 942 or a C at nucleotide position 1635 is indicative of increased likelihood of a neuropsychiatric disorder in the individual as compared

with an individual having one or more of a G at nucleotide position 476, a T at nucleotide position 942 or a T at nucleotide position 1635.

11. The method according to Claim 10, wherein the dopamine beta-hydroxylase gene has the nucleotide sequence of SEQ ID NO: 1.

12. The method according to Claim 10, wherein the nucleotide present at all three of nucleotide positions 476, 942 and 1635 of the dopamine beta-hydroxylase gene is determined.

13. The method according to Claim 10, wherein the individual is an individual at risk for development of a neuropsychiatric disorder.

14. The method according to Claim 10, wherein the neuropsychiatric disorder is bipolar disorder.

15. A nucleic acid molecule comprising:

a) the nucleic acid sequence of SEQ ID NO: 1, wherein the nucleic acid sequence comprises a polymorphic site at nucleotide positions 476, 942 and 1635 of SEQ ID NO: 1 and wherein the nucleotide at one or more of the polymorphic sites is different from a nucleotide at a corresponding position in a corresponding reference allele; or

b) a portion of the nucleic acid sequence of (a) which is at least ten nucleotides in length and which comprises at least one of the polymorphic sites.

16. The nucleic acid molecule according to Claim 15, wherein the nucleotide at all three polymorphic sites is different from a nucleotide at a corresponding position in a corresponding reference allele.

17. An allele-specific oligonucleotide that hybridizes to the nucleic acid molecule of Claim 15.

18. A peptide comprising all or a portion of the amino acid sequenc eof SEQ ID NO: 2, wherein said peptide is at least 10 amino acids in length and wherein the amino acid sequence comprises a serine at amino acid position 304 and a cysteine at amino acid position 535.

19. A method of diagnosing or aiding in the diagnosis of a neuropsychiatric disorder in an individual comprising

a) obtaining a biological sample comprising dopamine beta-hydroxylase protein or relevant portion thereof from the individual; and

b) determining the amino acid present at one or more of amino acid positions 304 and 535 of the dopamine beta-hydroxylase protein,

wherein presence of one or more of an alanine at amino acid position 304 or an arginine at amino acid position 535 is indicative of increased likelihood of a neuropsychiatric disorder in the individual as compared with an individual having one or more of a serine at amino acid position 304 or a cysteine at amino acid position 535.

20. A method of Claim 19, wherein the amino acid present at both of positions 304 and 535 of the dopamine beta-hydroxylase gene is determined.

21. The method of Claim 19, wherein the dopamine beta-hydroxylase protein has the amino acid sequence of SEQ ID NO: 2.

22. The method of Claim 19, wherein the neuropsychiatric disorder is selected from the group consisting of bipolar disorder, schizophrenia, schizoaffective disorder, recurrent unipolar depression, hypomania, mood disorders, anxiety disorders,

ADHD, Tourette's syndrome, addictive disorders, substance use disorders, substance abuse disorders, and disorders related to blood pressure.

23. The method of Claim 22, wherein the neuropsychiatric disorder is bipolar disorder.

24. A method of diagnosing or aiding in the diagnosis of a neuropsychiatric disorder in an individual comprising

a) obtaining a biological sample comprising dopamine beta-hydroxylase protein or relevant portion thereof from the individual; and

b) determining the amino acid present at one or more of amino acid positions 304 and 535 of the dopamine beta-hydroxylase protein,

wherein presence of one or more of a serine at amino acid position 304 or a cysteine at amino acid position 535 is indicative of reduced likelihood of a neuropsychiatric disorder in the individual as compared with an individual having one or more of an alanine at amino acid position 304 or an arginine at amino acid position 535.

25. A method of Claim 24, wherein the amino acid present at both of positions 304 and 535 of the dopamine beta-hydroxylase gene is determined.

26. The method according to Claim 24, wherein the dopamine beta-hydroxylase protein has the amino acid sequence of SEQ ID NO: 2.

27. The method according to Claim 24, wherein the neuropsychiatric disorder is bipolar disorder.